

forming an oxidation layer over said second layer by contacting said second layer with hydrogen, oxygen and nitrous oxide gases; and

forming a third layer of conductive material over said oxidation layer.

40. (Amended) A method of forming a capacitor structure in a semiconductor device, comprising:

depositing a layer of silicon nitride over a conductive layer formed over a substrate, said layer of silicon nitride having a thickness not exceeding about 60 Angstroms;

forming an oxidation layer over said silicon nitride by contacting said silicon nitride layer with hydrogen, oxygen and nitrous oxide gases.

44. (Amended) The method of claim 40, wherein said silicon nitride layer is deposited to a thickness not exceeding about 50 Angstroms.